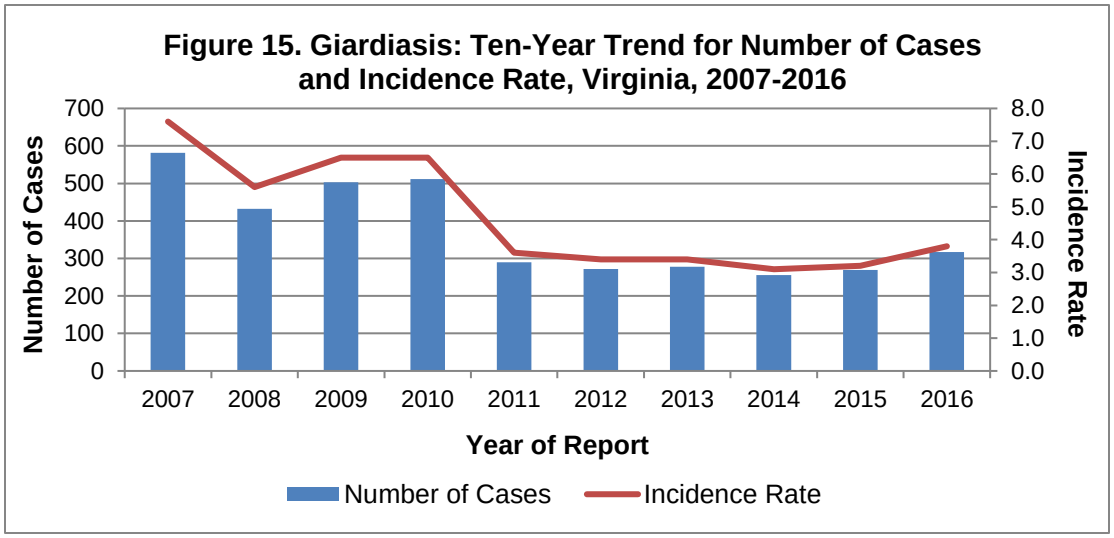
Giardiasis

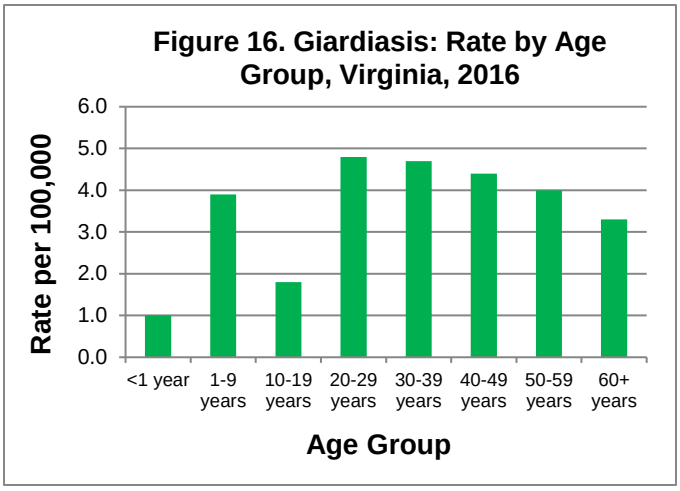
Agent: *Giardia intestinalis* (parasite)
Mode of Transmission: Person-to-person transmission by hand-to-mouth transfer of cysts from the feces of an infected person. Localized outbreaks are more often due to ingestion of cysts in fecally-contaminated drinking and recreational water (e.g., lakes, rivers, springs, ponds, and streams) than from fecally-contaminated food.
Signs/Symptoms: Symptoms may include diarrhea, abdominal pain, bloating, nausea and vomiting. A person may be asymptomatic or develop a prolonged illness.
Prevention: Hands should be washed carefully after using the bathroom, after changing diapers or cleaning a child who has used the bathroom, after handling animals or their feces, and before preparing and eating food. Recreational water or untreated water from shallow wells, lakes, rivers, springs, ponds or streams should not be consumed unless boiled or appropriately filtered. Persons with diarrhea should not swim at recreational water venues.

Giardiasis: 2016 Data Summary	
Number of Cases:	317
5-Year Average Number of Cases:	273.0
% Change from 5-Year Average:	+16%
Incidence Rate per 100,000:	3.8

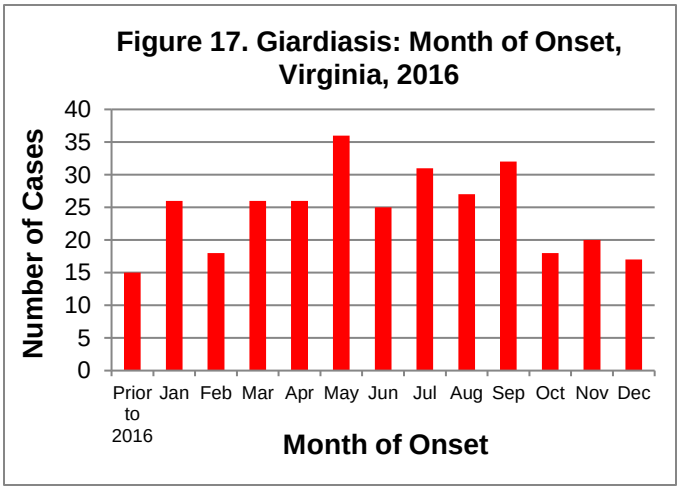
In 2016, 317 cases of giardiasis were reported in Virginia. This represents an 18% increase from the 269 cases reported in 2015, and a 16% increase from the previous 5-year average of 273 cases per year. The ten-year trend in reported cases of giardiasis in Virginia is shown in Figure 15. The lower number of cases that has been seen beginning in 2011 is the result of a change in the national surveillance case definition which occurred in that year. The change in definition required documentation of clinically compatible illness in addition to a positive laboratory result in order for the case to be counted in public health surveillance.



In each of the four age groups that represent adults age 20-59 years of age, the incidence rate was 4.0-4.8 per 100,000 population (Figure 16); 65% of the cases reported in 2016 occurred in persons within this age range. This age distribution is different from what was seen in 2015, where the rate was the highest in the 1-9 year age group. Race information was not reported for 62% of cases in 2016. Among cases with a known race, the incidence rate was highest among the "other" race population (2.2 per 100,000), followed by the white population (1.5) and the black population (1.0). A much higher incidence rate was seen among males (4.9 per 100,000) than females (2.7 per 100,000). Nearly two-thirds (64%) of the cases occurred among males.



As in 2015, the northern region experienced the largest number of cases (151 cases) and the highest incidence rate (6.2 per 100,000), followed by the northwest region (3.7 per 100,000) and the eastern region (3.0 per 100,000). Rates were lowest in the central (2.3 per 100,000) and southwest (2.2 per 100,000) regions. Rates by locality can be seen in the map below. Cases occurred throughout the year, with the highest number (36 cases) occurring in May. (Figure 17).



While the source of exposure for sporadic cases cannot usually be determined, 37% of cases in 2016 occurred in people who reported travel prior to illness onset, including 12 persons who traveled to other states in the U.S. and 52 who traveled to other countries. Over 20% reported recreational water exposure, and approximately 10% reported consuming untreated water. Fifteen cases (5%) required hospitalization.

Giardiasis Incidence Rate by Locality
Virginia, 2016